

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) An optical receiver circuit comprising:
an optical converter circuit ~~(38) converting to convert~~ optical power into electrical power;
a sensor circuit connected to the optical converter circuit, the sensor circuit detecting to detect and output a characteristic value of the electrical power; and
an attenuator circuit ~~(44) having comprising~~ a variable attenuation, the variable attenuation ~~being controlled by dependent on~~ the characteristic value of the electrical power output by the sensor circuit, wherein the attenuator circuit is configured to provide so as to obtain a constant output signal level of the optical receiver circuit;
wherein the attenuator circuit comprises a step attenuator circuit comprising:
a plurality of cascaded attenuator stages, wherein each of the continuing stages comprises two resistors and a semiconductor switch in series resistors and another semiconductor switch connected to bridge one or resistors; and
capacitors to separate respective input ends the attenuator stages, and input capacitor to connect an input end of the attenuator stages to an output of the optical receiver circuit, and an output capacitor to connect an output of the attenuator circuit to a load impedance.
2. (currently amended) An optical receiver circuit according to claim 1, wherein the optical converter circuit ~~(38) comprises~~ a photodiode.

3. (currently amended) An optical receiver circuit according to claim 1, wherein the sensor circuit comprises a resistor network ~~(58, 60)~~ connected to the optical converter circuit ~~(38)~~ in order to derive a control voltage V_{CONTR} as the characteristic value of the electrical power output by the optical converter circuit ~~(38)~~.

4. (currently amended) An optical receiver circuit according to claim 1, wherein the ~~attenuator circuit (44) is comprises a step attenuator circuit comprising a plurality of~~ cascaded attenuator stages ~~which~~ can be selectively switched to active states.

5. (currently amended) An optical receiver circuit according to ~~claim 4, claim 3,~~ wherein the sensor circuit comprises an A/D converter ~~(64) converting to convert~~ the control voltage V_{CONTR} into a digital signal ~~controlling to control~~ the attenuator stages of the attenuator circuit ~~(44)~~.

6. (original) An optical receiver circuit according to claim 4, wherein the respective attenuator stages each have a different attenuation value.

7. (currently amended) An optical receiver circuit according to claim 1, wherein ~~each of~~ the attenuator stages ~~are attenuator stages comprising~~ comprises a resistor ~~(86, 90, 94, 96, 102, 106)~~ and a semiconductor switch in series with the resistor ~~(86, 90, 94, 96, 102, 106)~~.

8. (canceled)

9. (canceled)

10. (currently amended) An optical receiver circuit according to claim 7, wherein the semiconductor switches ~~are comprise~~ MOSFETs ~~(88, 92, 98, 100, 104, 109)~~.

11. (new) An optical receiver circuit comprising:
an attenuator circuit connected to the optical converter circuit, the attenuator circuit to receive an electrical signal from an optical converter circuit and to provide a constant output signal level of the optical receiver circuit, wherein the attenuator circuit comprises:
a plurality of cascaded attenuator stages to selectively attenuate an electrical signal from the optical converter circuit dependent on a characteristic value of the electrical power output by a sensor circuit; and
a capacitor connected between adjacent attenuator stages to separate the adjacent attenuator stages.
12. (new) The optical receiver circuit according to claim 11, further comprising an input capacitor to connect an input end of the attenuator circuit to an output of the optical receiver circuit.
13. (new) The optical receiver circuit according to claim 11, further comprising an output capacitor to connect an output of the attenuator circuit to an input of a matching network.
14. (new) The optical receiver circuit according to claim 11, wherein each attenuator stage comprises:
a resistor; and
a semiconductor switch in series with the resistor, wherein the attenuation stage is connected in parallel with the optical converter circuit.
15. (new) The optical receiver circuit according to claim 14, wherein each attenuator stage further comprises:
another resistor, wherein the resistors are connected in series; and
another semiconductor switch connected in parallel with the other resistor to bridge the other resistor.

16. (new) The optical receiver circuit according to claim 11, further comprising the optical converter circuit connected to an attenuator circuit, the optical converter circuit to convert optical power into the electrical power.
17. (new) The optical receiver circuit according to claim 11, further comprising the sensor circuit connected to the optical converter circuit, the sensor circuit to detect and output the characteristic value of the electrical power.
18. (new) The optical receiver circuit according to claim 17, wherein the sensor circuit comprises a resistor network connected to the optical converter circuit, the resistor network derive a control voltage V_{CONTR} from the electrical power as the characteristic value of the electrical power.
19. (new) The optical receiver circuit according to claim 18, further comprising an analog-to-digital converter connected to the sensor circuit, the analog-to-digital converter to convert the control voltage V_{CONTR} to one of a plurality of digital signals, wherein each of the plurality of digital signals comprises a control signal for a respective attenuator stage of the attenuator circuit, wherein each of the attenuator stages has a different attenuation value.